

PROCEEDINGS OF THE
ROYAL ENTOMOLOGICAL SOCIETY
OF LONDON

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ORDINARY MEETING

WEDNESDAY, 20th JANUARY, 1960, at 5.30 p.m. (Tea 5 p.m.)

AGENDA

1. Confirmation of the Proceedings of the Ordinary Meeting held on 2nd December, 1959.
2. Recommendations of candidates for Fellowship. First reading.
3. Recommendations of candidates for Fellowship. Second reading.
4. Announcement of election of new Fellows.
5. Nomination of Officers and Council for 1960. Second reading.
6. Admission of Fellows.
7. Exhibits.
8. Communications.

Entomology at Malham Tarn

From 1954 to 1958 a group of members of the Entomological Section of the Yorkshire Naturalists' Union investigated the insect fauna of the Malham Tarn area. Three members of the team, Messrs. **J. H. Flint**, **H. M. Russell** and **H. N. Michaelis**, present short papers on certain aspects of their work, and will be introduced by **Dr. W. D. Hincks**, who will also conclude the talks.

NOTICES

The **Annual Meeting** will be held on *Wednesday, 3rd February, 1960*, at 5.30 p.m.

PROCEEDINGS OF THE ORDINARY MEETING HELD ON 2ND DECEMBER, 1959

Mr. E. O. PEARSON, Vice-President, in the Chair

Present, 71 Fellows and 16 Visitors

The minutes of the Ordinary Meeting held on 4th November, 1959 were confirmed and signed by the Vice-President.

The names of the following candidates for election were read for the first time : Mr. John Stuart Edwards ; Dr. Alastair Fraser, B.Sc., Ph.D. ; Mr. Roger F. J. Markey ; Mr. Alan Tunnard Marshall, B.Sc. ; Mr. John Michael Nelson ; Mr. Hans Raj Pajni, M.Sc. ; Mr. Farooq Ahmad Siddiqui ; Mr. John Strangways-Dixon ; Dr. Mavelikara Godavarma Raja Varma, B.Sc., Ph.D. ; and Professor Mahendra Kumar Varma, M.Sc.

For the second time (taken as read) : Mr. Samuel Apeji ; Dr. Robert E. Blackith, Ph.D., D.I.C., A.R.C.S. ; Mr. Richard James Brunning, B.Sc. ; Mr. Anthony Eve, B.Sc. ; Mr. Alan Charles Eyles ; Mr. Bruce Ing ; Mr. Surrinder Nath, M.Sc. ; Miss Joan E. R. Salter ; Mr. George James Smith ; and Miss Hilary May Walker.

The Secretary read the names of the following newly elected Fellows of the Society : Mr. Peter Fleming Aitken, B.Sc., c/o South Australian Museum, Adelaide, South Australia ; Mr. Mohammad Ameeruddin, Plant Quarantine Division, C.G.O. Building, Chittagong, East Pakistan ; Dr. Shahid Husain Ashrafi, Ohio State University, Columbus 10, Ohio, U.S.A. ; Mr. Peter Rowland Bailey, B.Sc., Glendale, 39 Broomfallen Road, Scotby, Carlisle ; Mr. Ralph Chamberlain, Department of Agricultural Zoology, Queen's University, Belfast ; Mr. Donald Ivan Chapman, 38 Horn Lane, Woodford Green, Essex ; Mr. Alexander Davidson, Cotton Experiment Station, P.O. Kibos, Kenya ; Dr. Henry John Egglisshaw, Freshwater Fisheries Laboratory, Faskally, Pitlochry, Perthshire ; Mr. John C. Ene, Department of Zoology, University College, Ibadan, Nigeria ; Mr. John Forsyth, B.Sc., Faculty of Agriculture, University College of Ghana, Legon, Accra, Ghana ; Mr. Lameck Kazembe Haza Goma, M.A., B.Sc., Department of Zoology, Makerere University College, P.O. Box 262, Kampala, Uganda ; Mr. William John Walter Hines, M.Sc., 36 Church Street, Slough, Bucks. ; Mr. Lance Southward Kelly, 205 Roose Road, Barrow-in-Furness, Lancs. ; Miss Daphne Linscott, 8 Gourock Road, Eltham, London, S.E.9 ; Mr. David Kendray McAlpine, The Australian Museum, Sydney, New South Wales ; Mr. Michael Edward Marchant, 32 Woodfield Road, Braintree, Essex ; Mr. Sayed Tawqir ul Hasan Naqvi, Department of Plant Protection, Pakistan Secretariat, Block 52, Government of Pakistan, Karachi ; Mr. P. K. Rajagopalan, M.Sc., Virus Research Centre, 20A Wellesley Road, P.O. Box 11, Poona, 1, India ; Mr. A. V. Sadanand, Regional Malaria Organisation, Tanjore, South India ; Mrs. Joan Marjorie Sherratt, 85 Goldsmith Street, Nottingham ; Mr. Donald Henry Smith, Somerdale, Welton Road, Brough, Yorkshire ; Mr. Timothy Ajibola Taylor, Department of Agricultural Zoology, King's College, Newcastle-upon-Tyne, 1 ; and Mr. Douglas Harvey Welch, 140 Eglinton Road, Plumstead, London, S.E.10.

Thanks were voted to donors of gifts to the Library since the last meeting.

The Secretary read for the first time the following names of Fellows nominated by the Council to serve as Officers and Council for 1960 :

President: Dr. B. P. Uvarov, C.M.G., F.R.S.

Treasurer: Dr. N. E. Hickin

Secretary: Dr. Paul Freeman

Editor: Mr. W. H. Potts

Other Members of Council:

Mr. R. B. Benson

Professor D. S. Bertram

Mr. R. G. Davies

Dr. A. M. Easton

Dr. L. G. Higgins

Dr. J. S. Kennedy

Dr. B. R. Laurence

Mr. H. Oldroyd

Mr. E. O. Pearson

Professor G. C. Varley

Dr. N. Waloff

Mr. M. J. Way

Dr. C. B. Williams, F.R.S.

Alternative nominations, supported by four properly qualified Fellows of the Society, should reach the Secretary before the meeting to be held on 20th January, 1960.

Mrs. A. D. Aitken, Mr. A. E. Aston, Mr. J. C. Ene, Mr. A. H. Henson, Mr. L. A. Lickerish, and Mrs. J. M. Sherratt signed the Obligation Book and were admitted Fellows of the Society.

The following papers, accepted for publication in the *Transactions*, were read in title :

"Studies on the family Coelopidae (Diptera)," by H. J. Egglshaw [Communicated by Dr. E. T. Burt.]

"Variation in the adult and immature stages of *Nysius huttoni* White (Heteroptera : Lygaeidae), with a note on the validity of the genus *Brachynysius* Usinger," by A. C. Eyles. [Communicated by Mr. L. Gurr.]

"Observations on egg-laying in *Ilybius fuliginosus* F. and *I. ater* Deg. (Coleoptera : Dytiscidae)," by D. J. Jackson.

"On the method by which *Stenus* and *Dianous* (Coleoptera : Staphylinidae) return to the banks of a pool," by M. F. Jenkins.

"The gall midges of clover flower heads," by D. L. Milne.

"The flight activity of Heteroptera," by T. R. E. Southwood.

"Records of further Ethiopian Agromyzidae (Diptera), mainly from South Africa, including eighteen species new to science," by K. A. Spencer.

"Three new Omaliine genera from Asia and Australasia previously confused with *Phloeonomus* Thomson (Coleoptera : Staphylinidae)," by W. O. Steel.

Dr. J. L. Cloudsley-Thompson made the following short communication on a new sound-producing mechanism in centipedes: The anal legs of certain scolopendromorph centipedes, like the walking legs of Scutigermorpha, can be autotomised by their possessor. The severed limb may then make spontaneous movements, accompanied by creaking sounds, whose function is presumably to distract the attention of predatory enemies. The sound appears to result from stresses set up in the cuticle when the limb is flexed and straightened. These stresses are caused by large apodemes attached to the proximal end of one segment and lying within the retractor muscles of the next. The communication was illustrated by sections of the anal leg of *Rhysida nuda*, showing apodemes; the

anal leg of *Scolopendra* sp., potashed and dissected to show apodemes; and the locomotory leg of the same animal treated in the same way, showing the absence of these apodemes.

In reply to an enquiry, Dr. Cloudsley-Thompson said he had not heard the sound when the apparatus was attached to the animal. Mr. C. N. Hawkins suggested the sound might serve to detract the enemy from the centipede.

Mr. J. C. Ene gave a paper on parental care shown by a West African Mantis, *Tarachodes afzelii* (Stål), an abstract of which appeared on page 29.

A short discussion followed in which Professor G. C. Varley asked whether the normal prey differed very much in size from newly hatched nymphs. Mr. Ene replied that it did not always do so and they did sometimes capture prey the same size as the nymphs. The male would eat the nymphs readily, as also would a female not guarding an egg mass.

Dr. N. Waloff asked whether the Hymenopterous parasites were able to parasitize eggs during oviposition by clinging to the leg of the Mantis. Mr. Ene replied that they might do so and quoted the case of a Chalcid parasitising all the eggs as soon as oviposition was completed, the female taking no notice, which suggested that it was only after constructing the ootheca that the protective mechanism was triggered off.

Mr. M. E. Solomon asked whether the ants were able to get through the ootheca and damage the eggs, to which Mr. Ene replied that this did happen sometimes; the female had been seen to ignore numerous ants but never winged parasites.

Professor G. C. Varley made a communication, illustrated by a mechanical model, on the wing movements of a fly, an abstract of which appeared on page 29.

Mr. C. N. Hawkins asked why flies flew backwards against a window, apparently contrary to the laws of gravity. Professor Varley said no information was available on this point.

Dr. L. Davies gave a paper on gonotrophic patterns in Canadian pest black flies (Diptera: Simuliidae), an abstract of which appeared on page 30.

Dr. D. J. Lewis having asked the flight range of the species considered, Dr. Davies replied that this was not known at all accurately. The work had given evidence that *Prosimulium mixtum* adults could be taken two miles from the nearest known breeding site; and that nulliparous females of *Simulium venustum* dispersed in greater numbers than parous individuals, to a distance of two miles from breeding sites.

Mr. W. Victor Harris made a communication on some termites of British Honduras, an abstract of which appeared on page 30.

In thanking Mr. Harris for his contribution, the Chairman said that as a result of his visit to British Honduras an investigation has now been started on *Coptotermes niger*.

PAUL FREEMAN, *Honorary Secretary*.